

WHAT IS CLAIMED IS:

1. A test apparatus for loading certification of offshore lifting containers comprising:
 - a) a central vertical column assembly having means for incrementally extending its length;
 - b) a plurality of flexible members attached to said central column; and
 - 5 c) a footing assembly pivotally attached horizontally to said central vertical column.
2. The test apparatus of claim 1 wherein said means for incrementally extending comprises a screw jack assembly.
3. The test apparatus of claim 1 wherein said means for incrementally extending further comprises extension members.
- 10 4. The test apparatus of claim 1 wherein said flexible members further comprise extension means.
5. The test apparatus of claim 1 wherein said footing assembly further comprises means for extending.
6. The test apparatus of claim 1 wherein said footing assembly further comprises bracing
15 means connected between said footing assembly and said vertical column.
7. The test apparatus of claim 1 wherein said footing assembly comprises a plurality of extension members.
8. The test apparatus of claim 7 wherein said footing assembly and said extension members comprise a plurality of feet.
- 20 9. The test apparatus of claim 1 wherein said means for incrementally extending further comprises a linear actuator.

10. The test apparatus of claim 8 wherein said footing assembly further comprises a means for substantially equalizing a load exerted on said feet along the length of said footing assembly.

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11. A test apparatus for loading certification of offshore lifting containers comprising:

- 5 a) a vertical column assembly comprising a mechanical incremental extending means and a pressure operated extending means;
- b) a footing assembly centrally attached to said vertical column assembly; and
- c) a means for redistributing loading applied to said footing assembly.

10 12. The test apparatus according to claim 11 wherein said vertical column further comprises extension members.

13. The test apparatus according to claim 11 wherein said pressure operated extending means is a hydraulic operated linear actuator.

14. The test apparatus according to claim 11 wherein said pressure operated extending
15 means is a compressed air operated linear actuator.

15. The test apparatus according to claim 11 wherein said mechanical incremental extending means is a threaded rod attached to the rod end of said pressure operated extending means and a rotatable hand wheel threaded upon said threaded rod.

16. The test apparatus according to claim 15 wherein at least a portion of said threaded rod
20 is located within a tubular portion of said central column.

17. The test apparatus according to claim 11 wherein said means for redistributing a load applied to said central footing assembly is a plurality of wood beams.

18. The test apparatus according to claim 11 wherein said structural test apparatus further comprises a plurality of footing extension assemblies attached to said footing assembly.

5 19. The test apparatus according to claim 18 wherein said structural test apparatus further comprises a plurality of trusses connected to said footing extension assemblies and said vertical column assembly.

20. The test apparatus according to claim 11 wherein said structural test apparatus further comprises a connecting means attached to a blind end of said pressure operated
10 extending means.

21. A method for testing the structural integrity of a lifting container comprising the steps of:

- a) placing a test apparatus comprising i) a central vertical column assembly having means for incrementally extending its length; ii) a plurality of flexible members
15 attached to said central column; and iii) a footing assembly attached horizontally to said central vertical column within the confines of the container;
- b) b) supporting said test apparatus upon a plurality of load distribution members located between said footing assembly and said container;
- c) c) attaching said flexible members to said container;
- 20 d) d) adjusting said means for incrementally extending the length of said vertical column until said flexible members are taunt; and

e) e) applying column loading to said footing assembly by further incrementally extending the length of said vertical column and thus distributing said loading throughout said container until a predetermined stress load on the container is reached.

5 22. The method according to claim 21 wherein the step of incrementally extending the length of said vertical column is achieved by activation of a linear actuator being extended to a predetermined pressure setting.

23. The method according to claim 21 further includes the step of extending said footing assembly to approximate said container length and applying bracing between said footing
10 assembly and said vertical column.